

Customer No.: 91343  
Application No.: 10/605,304  
Docket NO.: 11080-US-PA

### **REMARKS**

#### **Present Status of the Application**

The Office Action objected to the disclosure. Moreover, the Office Action rejected claims 1, 3, 5-8, 10-13, 15 and 18-20 under 35 U.S.C. 102(e), as being anticipated by Chen et al. (U.S. 2004/0214390 A1). The Office Action also rejected claims 4, 9, 16 and 17 under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (U.S. 2004/0214390 A1). The Office Action also indicated that claims 2 and 14 would be allowable if rewritten in independent form including all of the limitations of the base claims and any intervening claims. Applicants appreciate this indication of allowable subject matter but applicants assert that independent claims 1 and 13 are already distinguished over the cited references. Applicants have amended the specification and claim 1 to overcome the objection. After entry of the foregoing amendments, claims 1-20 remain pending in the present application, and reconsideration of those claims is respectfully requested.

#### **Summary of Applicant's Invention**

The Applicant's invention is directed to a method of manufacturing a buried plate of a deep trench capacitor. Because of usage of polysilicon material for defining the size of the buried plate, the inconsistency in dimension of the buried layer and in the capacitance of the capacitor due to using non-uniformity-thickness photoresist layer can be prevented. Further, a large quantity of oxygen gas is used in the thermal process to conduct the dopant diffusion and to form the oxide layer concurrently. Therefore, after

Customer No.: 91343  
Application No.: 10/605,304  
Docket NO.: 11080-US-PA

the oxide layer is removed, a bottle-shaped deep trench can be formed. The present invention can thereby complete the formation of a bottle-shaped deep trench structure and a buried plate of a deep trench capacitor at the same time. As a result, the manufacturing process is simplified and the manufacturing time is reduced.

#### **Discussion of objections**

According to the Office Action, the specification and claim 1 were objected to because of the informalities. In response thereto, applicants have amended the reference number 10a8 to 108a in the paragraph [0010] and corrected typo in claim 1, line 6. No new matter is entered.

#### **Discussion of Office Action Rejections**

The Office Action rejected claims 1, 3, 5-8, 10-13, 15 and 18-20 under 35 U.S.C. 102(e), as being anticipated by Chen et al. (U.S. 2004/0214390 A1). The Office Action also rejected claims 4, 9, 16 and 17 under 35 U.S.C. 103(a) as being unpatentable over Chen et al. (U.S. 2004/0214390 A1). Applicants respectfully traverse the rejections for at least the reasons set forth below.

Regarding with the evidence mentioned in the Response to Arguments to overcome the rejections under 35 U.S.C. 102(e), one of the joint inventors of the present invention, Yi-Nan Chen, is also the inventor of the inventive entities of the cited reference (U.S. 2004/0214390 A1). The inventor, Yi-Nan Chen, contributes to the inventive works and ideas of the rejected claims under 35 U.S.C. 102(e) by the Office Action. The

Customer No.: 91343  
Application No.: 10/605,304  
Docket NO.: 11080-US-PA

attachment is a declaration under 37 CFR 1.131 showing that the claimed subject matter rejected under 35 U.S.C. 102(e) by the Office Action and the cited reference were, at the time the invention was made, owned by the same person and assigned to the same assignee. Therefore, the cited reference is not by "another".

It is clearly believed that the cited reference, Chen et al. (U.S. 2004/0214390 A1), and the rejected claims of the present invention were invented by the same inventor and owned by the same assignee, the reference, Chen et al. (U.S. 2004/0214390 A1) is not qualified as prior art according to the Amendment of Patent Law by the American Inventor Protection Act of 1999 (AIPA), which renders the rejection under 35 U.S.C. 102 moot.

Customer No.: 91343  
Application No.: 10/605,304  
Docket NO.: 11080-US-PA

### CONCLUSION

For at least the foregoing reasons, it is believed that the pending claims 1-20 are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

Respectfully submitted,

Date :

*March 14, 2005*

*Belinda Lee*  
Belinda Lee

Registration No.: 46,863

Jianq Chyun Intellectual Property Office  
7<sup>th</sup> Floor-1, No. 100  
Roosevelt Road, Section 2  
Taipei, 100  
Taiwan  
Tel: 011-886-2-2369-2800  
Fax: 011-886-2-2369-7233  
Email: [belinda@jciipgroup.com.tw](mailto:belinda@jciipgroup.com.tw)  
[Usa@jciipgroup.com.tw](mailto:Usa@jciipgroup.com.tw)